Manitoba Agriculture

Guidelines For Estimating
FARM FENCING COSTS

Information Update

DATE: February, 1992

This publication is intended to assist you as a producer to calculate your own capital costs of constructing fences. It will provide you with a methodology for estimating your own costs when constructing perimeter fences for livestock enclosures. It will also provide you with a procedure for calculating your annual maintenance costs.

The cost estimates in this worksheet are based on assumptions outlined in the supporting pages. Default data provided in this budget require adjustments to reflect your own situation.

ASSUMPTIONS:

1. It was assumed that the installation of the posts was custom hired at $40/hour. The following was assumed for 1/2 mile:

conventional fence	15 hours
high tensile fence	5 hours
electric fence	4 hours

2. It was assumed that the owner/operator supplied the labour for stretching and stapling the wire to the posts. Owner/operator labour was valued at $8/hour. The following was assumed for 1/2 mile:

conventional fence	20 hours
high tensile fence	20 hours
electric fence	16 hours

3. To determine energy costs for the electric fence it was assumed that the costs were allocated over 10 miles.

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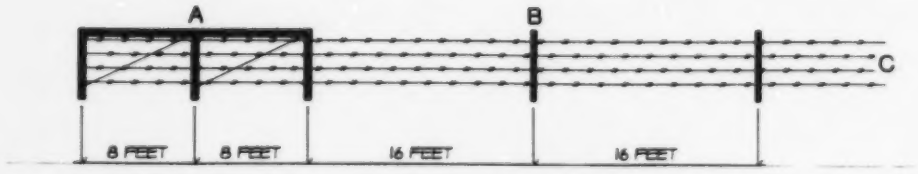
GUIDELINES FOR ESTIMATING ANNUAL FENCING COSTS
Per 1/2 mile (800 m)

Type of Fence - Cost per 1/2 Mile (800 m)

A. OPERATING COSTS	Conventional	High Tensile	Electric	Your Cost
1.01 Repairs & Maintenance	$ 33.83	$ 21.72	$ 14.21	$_____
1.02 Energy Cost	0.00	0.00	0.25	_____
1.03 Interest on Operating	2.03	1.30	0.87	_____
Total Operating Costs	$ 35.86	$ 23.02	$ 15.33	$_____
B. FIXED COSTS				
2.01 Depreciation	$ 84.58	$ 54.49	$ 35.53	$_____
2.02 Investment	67.66	43.59	28.42	_____
Total Fixed Costs	$ 152.24	$ 98.08	$ 63.95	$_____
C. LABOUR COSTS				
3.01 Annual Labour	$ 20.00	$ 12.00	$ 8.00	$_____
TOTAL ANNUAL COST	**$ 208.10**	**$ 133.10**	**$ 87.28**	$_____

CAPITAL COST FOR 1/2 MILE FENCE
(2640 ft or 800 m)

Conventional Barbed Wire

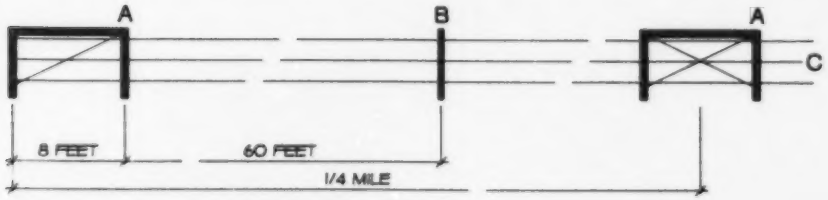


	$/1/2 mile
A - 13 brace posts @ $6.00 (4" - 5" tops x 8')	$ 78.00
B - 160 line posts @ $3.00 (3" - 4" tops x 6')	480.00
C - 8 rolls wire @ $45.00/roll	360.00
Staples 18 lbs @ $0.75/lb	13.50
Custom work	600.00
Labour (stretching and stapling)	160.00
Total Cost	$1,691.50

High Tensile Smooth Wire

A -	10 brace posts @ $6.00 (4" - 5" tops x 8')	$ 60.00
B -	54 line posts @ $3.50 (3" - 4" tops x 7')	189.00
C -	4 rolls wire @ $70.00/roll	280.00
D -	110 stays @ $1.25 (2" x 2" x 48")	137.50
Staples 9 lbs @ $0.75/lb		6.75
Springs 5 @ $7.00		35.00
Tighteners 5 @ $3.50		17.50
Custom work		200.00
Labour (stretching and stapling)		160.00
	Total Cost	$1,085.75

Electrified



A -	9 brace posts @ $4.50 (4" - 5" tops x 7')	$ 40.50
B -	42 line posts @ $3.00 (3" - 4" tops x 6')	126.00
C -	2 rolls (h.t.s.) wire @ $70.00/roll	140.00
Insulators 96 @ $1.00		96.00
Energizer cost		20.00
Custom Work		160.00
Labour (stretching and stapling)		128.00
	Total Cost	$ 710.50

A. OPERATING COSTS

1.01 Repairs & Maintenance

Annual repairs & maintenance costs were assumed to be equal to 2% of the original cost of the fence.

1.02 Energy Cost

Energy cost only applies to the electrified fence. For purposes of this budget it was assumed that 110 kilowatt hours are required for 10 miles of fencing, a cost of $0.045/kilowatt hour. The total cost would equal $4.95. Therefore, for a 1/2 mile of fencing the cost would be $0.25 per year.

1.03 Interest on Operating

Interest on operating is calculated on 1/2 of the annual operating costs. An operating interest rate of 12% was assumed.

B. FIXED COSTS

2.01 Annual Depreciation was determined from the following formula:

$$\text{Annual Depreciation} = \frac{\text{Original Cost - Salvage Value}}{\text{Useful Life}}$$

Salvage value was assumed to be zero and useful life was estimated at 20 years.

2.02 Investment Cost was determined from the following formula:

Investment Cost = [(Original Cost + Salvage Value) ÷ 2] x Interest Rate

An interest rate of 8% was assumed.

C. LABOUR COSTS

3.01 Annual labour - a certain amount of labour will be required for checking and maintaining fence lines. For purposes of this budget all labour, whether supplied by the operator or hired, is charged at $8/hour.

The labour required is estimated as follows:

Conventional	2.5 hours
High Tensile	1.5 hours
Electric	1.0 hours

FOR MORE INFORMATION SEE YOUR LOCAL MANITOBA AGRICULTURE OFFICE.

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